Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1. - 21. (Cancelled)

22. (Previously Presented) Brake-by-wire actuator for actuating the brake system of a motor vehicle, comprising a simulator which can be acted upon by a brake pedal, with an output signal of an actuation sensor being sent to an electronic control unit which controls a pressure source in response to the signal of the actuation sensor, and with an output of the pressure source that is connected to a distributor device for the brake force and actuates individual wheel brakes of the vehicle, also comprising means for enabling actuation of the brakes by muscular power within a fallback mode,

wherein a first actuation component, defined by the brake pedal or a component articulated at the brake pedal, and a second actuation component that is connected downstream in the flux of force are configured relative to one another such that the first actuation component remains mechanically uncoupled in a non-force-transmitting manner from the second actuation component during a by-wire mode with a lost travel remaining between the first and second actuation components during the by-wire mode.

23. (Previously Presented) Brake-by-wire actuator as claimed in claim 22,

wherein a means is provided in order to automatically reduce the lost travel after a by-wire mode at the commencement of a brake actuation executed by muscular power.

24. (Previously Presented) Brake-by-wire actuator as claimed in claim 23,

wherein said means may be actuated by means of an electric, electromagnetic, hydraulic, or pneumatic actuator, which will automatically adopt a closing position for reducing the lost travel in the fallback mode.

25. (Previously Presented) Brake-by-wire actuator as claimed in claim 24,

wherein the means is provided as a clutch between the two actuation components.

26. (Withdrawn) Brake-by-wire actuator as claimed in claim 25,

wherein the means comprises a block-shaped body which bridges the lost travel between the actuation components in a form-fit manner.

27. (Withdrawn) Brake-by-wire actuator as claimed in claim 25,

wherein the actuator includes a spring for the elastic preload of the block-shaped body and a solenoid for returning or keeping back the block-shaped body in the opening position.

28. (Withdrawn) Brake-by-wire actuator as claimed in claim 22,

wherein the pressure source comprises a hydraulic booster with at least one hydraulic pump which is actuatable by electric signals in the by-wire mode, and wherein the actuation in the fallback mode is carried out hydraulically by way of a master brake cylinder.

29. (Withdrawn) Brake-by-wire actuator as claimed in claim 28,

wherein the pump feeds a high-pressure accumulator.

30. (Previously Presented) Brake-by-wire actuator as claimed in claim 22,

wherein the pressure source comprises a pneumatic booster which is actuatable by electric signals in the by-wire mode and mechanically by way of the actuation components in the fallback mode.

31. (Withdrawn) Brake-by-wire actuator as claimed in claim 30,

wherein the pressure source includes a pneumatic booster and additionally a hydraulic pump being actuated in the event of a defect of the pneumatic booster or when boosting is not sufficient.

32. (Withdrawn) Brake-by-wire actuator as claimed in claim 30,

wherein the pressure source includes an electromotively driven master brake cylinder.

33. (Previously Presented) Brake-by-wire actuator as claimed in claim 22,

wherein there is provision of at least one member of the group consisting a travel sensor in a pneumatic booster, a pneumatic pressure sensor in the pneumatic booster, a differential pressure sensor in the pneumatic booster, and a hydraulic pressure sensor in a brake circuit detecting deviations from nominal values, and

wherein the electronic unit on account of detected sufficient deviations detects a malfunction in the brake system and initiates safety processes.

34. (Withdrawn) Brake-by-wire actuator as claimed in claim 33,

wherein the travel sensor and the pressure sensor or the differential pressure sensor detects a point of maximum boosting of the booster, and

wherein the hydraulic pump is started by way of the electronic unit.

35. (Previously Presented) Brake-by-wire actuator as claimed in claim 33,

wherein the travel sensor or the pressure sensor or the differential pressure sensor detects a point of maximum boosting of the booster, and

wherein the hydraulic pump is started by way of the electronic unit.

36. (Previously Presented) Brake-by-wire actuator as claimed in claim 22,

wherein the simulator includes a motor or a spring used to generate reaction forces.

37. (Previously Presented) Brake-by-wire actuator as claimed in claim 25,

wherein the position of the point of application of the brake pedal in relation to the subsequent actuation component is adjustable.

38. (Previously Presented) Brake-by-wire actuator as claimed in claim 37,

wherein the brake pedal is coupled to a clutch shaft pivotally mounted in a longitudinal direction of the clutch shaft, the clutch shaft being longitudinally displaceable relative to the input member in dependence on a rotary position of the clutch shaft relative to the input member or is in engagement with the input member in an axial direction.

39. (Currently Amended) Brake-by-wire actuator ~~as claimed in claim 38,~~for actuating the brake system of a motor vehicle, comprising a simulator which can be acted upon by a brake pedal, with an output signal of an actuation sensor being sent to an electronic control unit which controls a pressure source in response to the signal of the actuation sensor, and with an output of the pressure source that is connected to a distributor device for the brake force and actuates individual wheel brakes of the vehicle, also comprising means for enabling actuation of the brakes by muscular power within a fallback mode;

wherein a first actuation component, defined by the brake pedal or a component articulated at the brake pedal, and a second actuation component that is connected downstream in the flux of force are configured relative to one another such that the first actuation component remains mechanically uncoupled in a non-force-transmitting manner from

the second actuation component during a by-wire mode with a lost travel remaining between the first and second actuation components during the by-wire mode;

wherein a means is provided in order to automatically reduce the lost travel after a by-wire mode at the commencement of a brake actuation executed by muscular power and said means is a clutch between the two actuation components which may be actuated by means of an electric, electromagnetic, hydraulic, or pneumatic actuator, which will automatically adopt a closing position for reducing the lost travel in the fallback mode;

wherein the position of the point of application of the brake pedal in relation to the subsequent actuation component is adjustable and the brake pedal is coupled to a clutch shaft pivotally mounted in a longitudinal direction of the clutch shaft, the clutch shaft being longitudinally displaceable relative to the input member in dependence on a rotary position of the clutch shaft relative to the input member or is in engagement with the input member in an axial direction; and

wherein both the clutch shaft and the input member include projections serially arranged in their longitudinal direction in a row, and in a first rotary position of the clutch shaft in relation to the input member, the projections of the clutch shaft and the input member are disengaged, while in a second rotary position at least one projection of the clutch shaft is engaged with a projection of the input member.

40. (Previously Presented) Brake-by-wire actuator as claimed in claim 39,

wherein several rows of projections are provided at a predetermined angular distance over a periphery of the input member and the clutch shaft.

41. (Previously Presented) Brake-by-wire actuator as claimed in claim 39,

wherein the clutch shaft is equipped with a longitudinal bore that is open towards the input member, with one end of the input member projecting into said bore, and wherein peripheral surfaces of the end of the input member and of the longitudinal bore in the clutch shaft carry the projections.

42. (Previously Presented) Brake-by-wire actuator as claimed in claim 38,

wherein the clutch includes a spring whose first end is supported on a housing of the clutch and whose second end is supported on a transmission member, with said transmission member being connectable to the clutch shaft pivotally mounted in the longitudinal direction of the clutch shaft, with said clutch shaft being longitudinally displaceable in relation to the

transmission member in dependence on a rotary position of the clutch shaft with respect to the transmission member or being in engagement with the transmission member in an axial direction by way of projections.

43. (Currently Amended) Brake-by-wire actuator ~~as claimed in claim 42,~~for actuating the brake system of a motor vehicle, comprising a simulator which can be acted upon by a brake pedal, with an output signal of an actuation sensor being sent to an electronic control unit which controls a pressure source in response to the signal of the actuation sensor, and with an output of the pressure source that is connected to a distributor device for the brake force and actuates individual wheel brakes of the vehicle, also comprising means for enabling actuation of the brakes by muscular power within a fallback mode;

wherein a first actuation component, defined by the brake pedal or a component articulated at the brake pedal, and a second actuation component that is connected downstream in the flux of force are configured relative to one another such that the first actuation component remains mechanically uncoupled in a non-force-transmitting manner from the second actuation component during a by-wire mode with a lost travel remaining between the first and second actuation components during the by-wire mode;

wherein a means is provided in order to automatically reduce the lost travel after a by-wire mode at the commencement of a brake actuation executed by muscular power and said means is a clutch between the two actuation components which may be actuated by means of an electric, electromagnetic, hydraulic, or pneumatic actuator, which will automatically adopt a closing position for reducing the lost travel in the fallback mode;

wherein the position of the point of application of the brake pedal in relation to the subsequent actuation component is adjustable and the brake pedal is coupled to a clutch shaft pivotally mounted in a longitudinal direction of the clutch shaft, the clutch shaft being longitudinally displaceable relative to the input member in dependence on a rotary position of the clutch shaft relative to the input member or is in engagement with the input member in an axial direction;

wherein the clutch includes a spring whose first end is supported on a housing of the clutch and whose second end is supported on a transmission member, with said transmission member being connectable to the clutch shaft pivotally mounted in the longitudinal direction of the clutch shaft, with said clutch shaft being longitudinally displaceable in relation to the transmission member in dependence on a rotary position of the clutch shaft with respect to the

transmission member or being in engagement with the transmission member in an axial direction by way of projections; and

wherein the clutch shaft is in engagement with the input member and disengaged from the transmission member in at least one first rotary position and is disengaged from the input member and in engagement with the transmission member in at least one second rotary position.

44. (Previously Presented) Brake-by-wire actuator as claimed in claim 22,

wherein the simulator which can be acted upon by a brake pedal is arranged at the brake pedal.

45. (Previously Presented) A brake system of a motor vehicle comprising:

a brake booster;

a master brake cylinder fluidly connected to the brake booster; and

a brake-by-wire actuator comprising a simulator which can be acted upon by a brake pedal, with an output signal of an actuation sensor being sent to an electronic control unit which controls the brake booster in response to the signal of the actuation sensor, and with an output of the brake booster that is connected to the master brake cylinder for controlling the brake force and actuating individual wheel brakes of the vehicle based upon the output signal of the actuation sensor, also comprising means for enabling actuation of the brakes by muscular power within a fallback mode, wherein a first actuation component, defined by the brake pedal or a component articulated at the brake pedal, and a second actuation component that is connected downstream in the flux of force are configured relative to one another such that the first actuation component remains mechanically uncoupled in a non-force-transmitting manner from the second actuation component during a by-wire mode with a lost travel remaining between the first and second actuation components during the by-wire mode.

46. (Previously Presented) Brake-by-wire actuator as claimed in claim 22, wherein, in the by-wire mode, the first actuation component and the second actuation component are disconnected.

47. (Previously Presented) Brake-by-wire actuator as claimed in claim 22, wherein one of the actuation components includes a recess in which the other actuation component is positioned in both the by-wire mode and the fallback mode.

48. (Withdrawn) Brake-by-wire actuator as claimed in claim 47, wherein, in the fallback mode, said one of the actuation components bears on the other actuation component, and in the by-wire mode said other actuation component does not bear on the other actuation component.

49. (Withdrawn) Brake-by-wire actuator as claimed in claim 22, wherein, in the by-wire mode, the first actuation component is unconstrained with respect to the second actuation component.